

AD-A079 132

NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA

F/B 6/5

COMPARISON OF ALCOHOL ABUSERS WHO ABUSED OTHER DRUGS WITH THOSE--ETC(U)

JUL 79 D KOLB , E K GUNDERSON

UNCLASSIFIED

NAVHLTHRSCHC-78-61

NL

10  
AC 3  
10-12

RECEIVED

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

END

DATE

FILED

2

80

ADA 079132

**COMPARISON OF ALCOHOL ABUSERS WHO ABUSED  
OTHER DRUGS WITH THOSE WHO DID NOT**

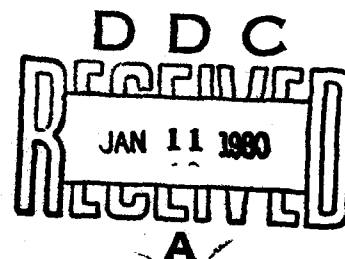
**R. HALL**

**E. K. E. ANDERSON**

*See 1473 in back*

**LEVEL**

**REPORT NO. 78-61**



**DISTRIBUTION STATEMENT A**

Approved for public release  
Distribution Unlimited



**NAVAL HEALTH RESEARCH CENTER**

P. O. BOX 85122  
SAN DIEGO, CALIFORNIA 92138

**NAVAL MEDICAL RESEARCH AND DEVELOPMENT COMMAND  
BETHESDA, MARYLAND**

Comparison of Alcohol Abusers Who Abused

Other Drugs with Those Who Did Not

Douglas Kolb

and

E. K. Eric Gunderson

Report No. 78-61

Research supported by the Bureau of Naval Personnel under Project Order  
Number N0002278F088AFZ and the Naval Medical Research and Development Command,  
Department of the Navy, under Research Work Unit M0096-PN.001-1034.

The views presented in this paper are those of the authors.

No endorsement by the Department of the Navy  
has been given nor should be inferred.

Approved for	
1. [ ]	
2. [ ]	
3. [ ]	
4. [ ]	
5. [ ]	
6. [ ]	
7. [ ]	
8. [ ]	
9. [ ]	
10. [ ]	
11. [ ]	
12. [ ]	
13. [ ]	
14. [ ]	
15. [ ]	
16. [ ]	
17. [ ]	
18. [ ]	
19. [ ]	
20. [ ]	
21. [ ]	
22. [ ]	
23. [ ]	
24. [ ]	
25. [ ]	
26. [ ]	
27. [ ]	
28. [ ]	
29. [ ]	
30. [ ]	
31. [ ]	
32. [ ]	
33. [ ]	
34. [ ]	
35. [ ]	
36. [ ]	
37. [ ]	
38. [ ]	
39. [ ]	
40. [ ]	
41. [ ]	
42. [ ]	
43. [ ]	
44. [ ]	
45. [ ]	
46. [ ]	
47. [ ]	
48. [ ]	
49. [ ]	
50. [ ]	
51. [ ]	
52. [ ]	
53. [ ]	
54. [ ]	
55. [ ]	
56. [ ]	
57. [ ]	
58. [ ]	
59. [ ]	
60. [ ]	
61. [ ]	
62. [ ]	
63. [ ]	
64. [ ]	
65. [ ]	
66. [ ]	
67. [ ]	
68. [ ]	
69. [ ]	
70. [ ]	
71. [ ]	
72. [ ]	
73. [ ]	
74. [ ]	
75. [ ]	
76. [ ]	
77. [ ]	
78. [ ]	
79. [ ]	
80. [ ]	
81. [ ]	
82. [ ]	
83. [ ]	
84. [ ]	
85. [ ]	
86. [ ]	
87. [ ]	
88. [ ]	
89. [ ]	
90. [ ]	
91. [ ]	
92. [ ]	
93. [ ]	
94. [ ]	
95. [ ]	
96. [ ]	
97. [ ]	
98. [ ]	
99. [ ]	
100. [ ]	

## SUMMARY

PROBLEM: The Navy now treats young alcohol and young drug abusers in separate programs. It is becoming increasingly apparent to treatment personnel that many individuals admitted to the two programs are polydrug abusers and the appropriateness of treating young men identified as alcohol or drug abusers together is being considered.

OBJECTIVE: The purpose of this study is to compare two groups of young alcohol abusers (age 25 or younger)—one group reported illegal drug use during the 6 months prior to treatment and the other group did not. Similarities and differences in social and psychological characteristics and post-treatment outcomes were compared.

APPROACH: From computerized records of individuals admitted to drug rehabilitation and alcohol rehabilitation facilities, young men who appeared in both data systems were identified. From drug facility data, men designated as having primarily alcohol abuse problems were selected for study. This group was divided into two subgroups, men who reported use of other drugs during the 6 months prior to treatment and men who reported alcohol use only. The two subgroups were compared on demography, military disciplinary histories, physical symptoms, problems associated with alcohol abuse, personality dimensions (Comrey Personality Scales), attitudes toward naval service, and post-treatment effectiveness. Effectiveness was defined as active duty status or receipt of a favorable discharge from service with no recommendation against reenlistment.

RESULTS: The alcohol abusers who reported using other drugs differed from men reporting only alcohol use on items reflecting greater involvement in a substance abusing subculture. The two groups did not differ on demography, physical symptoms, or problems related to alcohol abuse, military disciplinary histories, or post-treatment effectiveness. Slightly more than one-half of both groups were noneffective on short-term follow-up. Comrey scores differed for the two groups both pre-treatment and post-treatment; differences reflected more maturity and social conformity among non-drug users. Significant positive changes occurred during treatment for both groups on two scales: Emotional Stability and Extraversion.

CONCLUSIONS: Among young men screened in drug facilities and identified as having primarily alcohol abuse problems, those who used other drugs were similar to men who abused only alcohol on demography and service history. Differences on psychological dimensions did not appear to influence post-treatment effectiveness. The findings did not contraindicate continuing to treat both groups in the same type of program.

### RECOMMENDATIONS:

1. Information concerning the abuse of other drugs by men admitted to alcohol rehabilitation

facilities should be routinely collected.

2. An experimental program to treat young substance abusers together, whether the principal substance of abuse is alcohol or illegal drugs, should be instituted at selected alcohol facilities and rigorously evaluated.

## INTRODUCTION

### Background

Separate treatment programs for alcohol and drug abusers have been operated by the Navy for most of the current decade. During the early years of drug rehabilitation efforts, information was not routinely gathered on the abuse of alcohol by this group of predominately younger, first-enlistment personnel. This omission was corrected in the mid-1970s and alcohol was then included in the list of major substances abused. Information about the abuse of other drugs by men admitted to alcohol rehabilitation facilities has never been routinely collected, principally because such use is illegal and presumably fear of prosecution would deter individuals from freely giving such information. Historically, alcohol abuse, and particularly alcoholism, was concentrated among older personnel. Because the substance abuse patterns of older men were not thought to include other drugs, the lack of this information was not deemed important. With the expansion of programs to control alcohol abuse, increasingly larger numbers of younger men are being seen for treatment, men whose behavior patterns have developed during an era of widespread drug abuse, particularly among the youthful members of society. Thus, awareness of the abuse of drugs other than alcohol by men being treated for the latter has increased.

### Objective

This report is concerned with similarities and differences between two groups of young Navy enlisted men who were seen in drug-oriented rehabilitation facilities but whose substance abuse problems were determined to be primarily alcohol abuse. One group indicated alcohol as the only substance of abuse during the 6-month period preceding labeling the problem; the other group reported abusing other drugs in addition to alcohol.

### METHOD

### Sample

The computerized records from two independent data systems were matched to select the records of individuals appearing in both files during the years 1975-1977. One system contains records of personnel admitted to alcohol rehabilitation facilities; the other, to drug rehabilitation facilities. Individuals are not treated in alcohol facilities unless a primary alcohol problem has been identified. Many of the alcohol rehabilitation facilities operate residential programs. Only one of the drug facilities operates a residential program. The others are outpatient Counseling and Assistance Centers (CAACs) which increasingly perform screening functions for all substance abusers. Because originally the CAACs served drug abusers, all men referred

to them are given a test battery that includes a history of the abuse of all major drugs including alcohol during the preceding six months. As part of the intake evaluation, the counselor is required to designate the individual's primary substance abuse problem: drug, alcohol, or a combination of drug and alcohol.

The individuals selected for study were those Navy enlisted men, 25 years old or younger, who appeared in drug rehabilitation facilities (CAACs) for screening and were designated primary alcohol problems. This group was divided into those men who reported using only alcohol during the preceding six months ( $n = 52$ ) and those who reported using at least one other substance in addition to alcohol ( $n = 70$ ). The men included in the study completed Comrey Personality Scales on admission to and at the completion of alcohol rehabilitation. "The Comrey Personality Scales (CPS) provide a comprehensive, multi-dimensional assessment instrument for use in measuring major personality characteristics...which are held to underlie the everyday behavior of ('normal') individuals" (1). There are eight dimensions: Trust vs. Defensiveness (T), Orderliness vs. Lack of Compulsion (O), Social Conformity vs. Rebelliousness (C), Activity vs. Lack of Energy (A), Emotional Stability vs. Neuroticism (S), Extraversion vs. Introversion (E), Masculinity vs. Femininity (M), and Empathy vs. Egocentrism (P). Additionally, two scales, Validity and Response Bias, assess test-taking attitudes.

#### Procedure

Items selected for comparison from the drug and alcohol data bases were those reflecting demographic characteristics, substance abuse history, physical symptoms and problems associated with alcohol use, and attitudes toward the service. Post-rehabilitation status was determined as of March 30, 1978, from official Navy personnel records. Men were considered effective who were on active duty or had been released from service with favorable discharges and did not have recommendations against reenlistment. Ineffective men were those with negative recommendations for reenlistment or unfavorable discharges. From the same personnel records frequency counts of demotions, unauthorized absences, and desertions from service were obtained on all men.

The two groups of alcoholics, those who had abused other drugs and those who had not, were compared on all items including pre- and post-treatment CPS subscale scores using analysis of variance. The  $t$  test for paired samples was used for the pre-treatment-post-treatment comparisons on the CPS for each of the groups.

#### RESULTS

Young alcoholics who used other drugs differed from those who did not use other drugs on four items, all related to substance abuse. These differences are shown in Table 1. Users of

Table 1

Comparison of Young Alcoholics with Other Drug Use  
and with No Other Drug Use on Selected Variables

<u>Demography and Military Status:</u>	<u>No Other Drug Use</u>			<u>Other Drug Use</u>			<u>F- Ratio</u>	<u>Degrees of Freedom</u>	<u>Probability</u>
	<u>Mean</u>	<u>S.D.</u>		<u>Mean</u>	<u>S.D.</u>				
Age	21.58	2.08		21.36	2.08		.33	1,120	ns
Pay grade	3.27	1.33		2.90	1.23		2.51	1,120	ns
Years of service	2.56	2.15		2.43	3.62		.05	1,120	ns
GCT (Aptitude)	52.29	7.66		53.18	9.99		.28	1,116	ns
Education (Highest grade)	11.65	1.06		11.70	1.45		.05	1,120	ns
Race (Caucasian)	.79	.41		.84	.37		.59	1,120	ns
Marital status (Single)	.67	.47		.77	.42		1.46	1,120	ns
<u>Substance Abuse:</u>									
Alcohol use (High)	3.77	1.58		4.45	1.38		6.37	1,119	p < .01
Friends using marijuana (Number)	2.48	1.20		4.28	1.56		47.53	1,118	p < .001
Friends using hard drugs (Number)	1.48	.96		2.78	1.63		26.10	1,118	p < .001
Like to get drunk (Disagree)	3.31	1.82		2.44	1.53		8.01	1,118	p < .01
Post-Rehabilitation Status (Noneffective):	.54	.50		.52	.50		.03	1,115	ns

N

52

70



other drugs reported alcohol use during the preceding six months at a higher rate, reported larger percentages of friends who used marijuana and hashish as well as larger percentages who used drugs harder than marijuana and alcohol. They more often agreed with the statement that they liked to get drunk. The two groups did not differ on basic demographic variables: age, pay grade, years of service, General Classification Test (GCT) scores, years of education, racial group or marital status. There were no differences in problems or symptoms associated with alcohol use. Records of disciplinary difficulties during their service careers including numbers of demotions, unauthorized absences, and desertions did not discriminate between the groups. The mean number of days spent in alcohol rehabilitation facilities was similar. Status following treatment, with respect to active duty or receipt of a favorable discharge from service as opposed to an unfavorable discharge or a negative recommendation for reenlistment, was essentially the same for both groups, 52-54% ineffective.

Table 2  
Comparison of Young Alcoholics Who Used or Did Not Use  
Other Drugs on Comrey Personality Scales

Scale	<u>Pre-Treatment</u>		<u>Post-Treatment</u>		t	Probability
	<u>No Other Drug Use</u>	<u>Other Drug Use</u>	<u>No Other Drug Use</u>	<u>Other Drug Use</u>		
	Mean	S.D.	Mean	S.D.		
Trust	84.73	10.46	78.54	12.50	2.87	p < .01
Order	94.17	12.89	86.66	14.50	2.94	p < .01
Social Conformity	88.77	14.36	81.00	12.53	3.16	p < .01
Activity	97.48	17.76	88.60	16.00	2.87	p < .01
Emotional Stability	91.81	20.59	82.61	18.29	2.58	p < .05
Extraversion	73.85	25.37	76.08	19.09	-.55	ns
Masculinity	86.10	12.23	84.71	11.86	.63	ns
Empathy	95.85	14.70	90.88	15.88	1.75	ns
	N	52		70		
	Mean	S.D.	Mean	S.D.		
Trust	87.88	14.96	80.73	16.31	2.46	p < .05
Order	94.73	14.17	87.30	16.25	2.61	p < .01
Social Conformity	90.17	12.25	83.40	13.71	2.80	p < .01
Activity	99.71	13.61	91.11	13.54	3.43	p < .01
Emotional Stability	102.12	14.99	91.47	15.16	3.82	p < .01
Extraversion	83.71	18.79	83.47	19.70	.07	ns
Masculinity	86.17	11.38	85.78	13.02	.17	ns
Empathy	92.29	12.95	88.70	17.26	1.25	ns
	N	52		70		

Mean scores, presented in Table 2, on both the pre-treatment and post-treatment Comrey Personality Scales discriminated between the groups. Young alcoholics who did not abuse other

drugs had higher mean scores on the same five subscales both before and after treatment: Trust, Order, Social Conformity, Activity, and Emotional Stability. Table 3 shows that significant improvement following treatment was noted for both groups on the Emotional Stability and Extraversion scales.

Table 3  
Comparison of Changes in Comrey Personality Scores for  
Young Alcoholics Who Used or Did Not Use Other Drugs

<u>Comrey Scale</u>	<u>No Other Drug Use</u>					
	<u>Pre-Treatment</u>		<u>Post-Treatment</u>		<u>t</u>	<u>Probability</u>
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>		
Trust	84.73	10.46	87.88	14.96	-1.86	ns
Order	94.17	12.89	94.73	14.17	- .70	ns
Social Conformity	88.77	14.36	90.17	12.25	-1.08	ns
Activity	97.48	17.76	99.71	13.61	-1.39	ns
Emotional Stability	91.81	20.59	102.12	14.99	-3.94	p < .01
Extraversion	73.85	25.37	83.71	18.79	-3.73	p < .01
Masculinity	86.10	12.23	86.17	11.88	- .21	ns
Empathy	95.85	14.70	92.29	12.95	1.99	ns
	N	52		52		

<u>Comrey Scale</u>	<u>Other Drug Use</u>					
	<u>Pre-Treatment</u>		<u>Post-Treatment</u>		<u>t</u>	<u>Probability</u>
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>		
Trust	78.54	12.50	80.73	16.31	-1.40	ns
Order	86.66	14.50	87.30	16.25	- .24	ns
Social Conformity	81.00	12.53	83.40	13.71	-1.92	ns
Activity	88.60	16.00	91.11	13.54	-1.40	ns
Emotional Stability	82.61	18.29	91.47	15.16	-4.14	p < .01
Extraversion	76.08	19.09	83.47	19.70	-3.81	p < .01
Masculinity	84.71	11.86	85.78	13.02	- .63	ns
Empathy	90.88	15.88	88.70	17.26	1.18	ns
	N	70		70		

#### DISCUSSION

The young men in this population who abused other drugs in addition to alcohol appeared to be more involved in a substance abusing subculture than men who reported alcohol abuse only. This was reflected not only by their reported associations with others who used illegal drugs but also by heavier alcohol use and positive feelings about getting drunk. The use of other drugs by individuals heavily involved in alcohol use is consistent with Wechsler's (2) findings among teenage substance abusers.

The CPS profile of characteristics associated with greater involvement in substance abuse suggested that these men were less well-adjusted socially and emotionally than men reporting a lower rate of alcohol use and fewer drug taking associates. They could be described as incau-

tious individuals who had less faith in human nature and the basic honesty of others and who were critical of society and its rules. They expressed attitudes indicating little enjoyment in physical activity, hard work, or striving to excel. Their responses reflected a lack of self-confidence and instability of mood.

Improvement following treatment indicated that the men in both groups gained in feelings of self-confidence and optimism and that they were more comfortable and outgoing with others. The rehabilitation experience, however, did not modify to any significant degree opinions reflecting basic trust in individuals (Trust), acceptance of society as it is (Social Conformity), or interest in physical activity and hard work (Activity).

The differences noted between these two groups of alcohol abusers did not affect the decisions of the Navy to retain them on active duty or to discharge them for reasons of poor performance. About equal percentages of men in both groups were classified as ineffective.

This study does produce evidence that some Navy men referred for alcohol abuse will give information about their abuse of other illegal substances when asked to complete questionnaires requesting it. It has been argued that such information could not be obtained because of the fears of admitting illegal activity. Yet if rehabilitation is to be effective, the knowledge that substance abuse goes beyond use of alcohol would seem to be required. From the present study we have no way of knowing whether or not the staff personnel in alcohol treatment facilities were aware of the other drug abuse of some of these men. The data collected at the CAACs would not have been forwarded to alcohol rehabilitation facilities with the men who were transferred; data collection instruments used by alcohol rehabilitation facilities do not request information about other drug use.

Perhaps of more interest is the realization that the differences noted between the groups suggesting a more antisocial and immature adjustment of polydrug abusers did not affect short-term outcome. It might have been expected that more of these men would be prematurely separated from service because of their negative attitudes and possibly nonconforming behavior. However, there were no differences between the groups in achievement in service, i.e., advancement in pay grade or in rates of disciplinary difficulties--unauthorized absences, desertions, and demotions. These are the criteria which are most often used to separate men from service prior to completion of enlistment and which influence recommendations for reenlistment.

#### REFERENCES

1. Comrey A. L. EITS Manual for the Comrey Personality Scales. San Diego, Calif.: Educational and Industrial Testing Service, 1970.
2. Wechsler, H. & Thum, D. Teenage drinking, drug use and social correlates. Quarterly Journal of Studies on Alcohol, 1973, 34, 1220-1227.

#### ACKNOWLEDGEMENT

The authors gratefully acknowledge the technical assistance of Patricia Coben, Norma Heckman, and Frank Thompson.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 78-61	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Comparison of Alcohol Abusers Who Abused Other Drugs with Those Who Did Not		5. TYPE OF REPORT & PERIOD COVERED Interim Repts
7. AUTHOR(s) Douglas Kolb E. K. Eric Gunderson		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Health Research Center P.O. Box 85122 San Diego, California 92138		8. CONTRACT OR GRANT NUMBER(s) 12 13
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Medical Research and Development Command Bethesda, Maryland 20014		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS P.O. #N0002278F088AFZ W.U. #M0096-PN.001-1034
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Bureau of Medicine and Surgery Department of the Navy Washington, D.C. 20372		12. REPORT DATE Jul 79
		13. NUMBER OF PAGES 10
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES 14 NAVHLTHRSCHZ-78-61		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Navy personnel Alcohol abuse Drug abuse Comrey Personality Scales Program evaluation		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Two groups of young Navy alcohol abusers were compared. One group indicated the use of only alcohol during the 6 months preceding admission to a rehabilitation facility; the other group indicated use of other drugs in addition to alcohol. The groups differed in that those who abused other drugs reported higher rates of alcohol use, liking to get drunk, and more association with other users of illegal drugs. On a personality measure (the Comrey Personality Scales), the group abusing other drugs appeared less well adjusted socially		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE  
S/N 0102-014-6601

UNCLASSIFIED

392 642  
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

and emotionally at the beginning of treatment. Improvement during treatment was similar for both groups along the same dimensions. The groups did not differ on rates of disciplinary difficulties during their service careers or on rates of unfavorable discharge from service after release from rehabilitation.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

DEPARTMENT OF THE NAVY

COMMANDING OFFICER

NAVAL HEALTH RESEARCH CENTER

P.O. BOX 8512

SAN DIEGO, CA 92112

OFFICIAL BUSINESS

REPLY FOR PRIVATE USE, 3300

POSTAGE AND FEES PAID  
DEPARTMENT OF THE NAVY

DDO-316

